

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: io LED

Report Number: P282388

Luminaire Tested: **LDA2B208040D010 EU2B20NFL258040 2LBAPINSQ1MMS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P282388
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1809-951-26)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: io LED
Catalog Number: LDA2B208040D010 EU2B20NFL258040 2LBAPINSQ1MMS
Description: PORTFOLIO 2IN ADJ 2000 LUMEN LED LUMINAIRE WITH NARROW FLOOD OPTIC AND 2in Adj SQ PinHole, MMS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1913.4 lumens
Efficiency: N/A
Efficacy: 92.9 lumens/watt
Spacing Criteria (0/90/45): 0.33 / 0.3 / 0.32
Luminous Opening: Circular (Dia: 0.17' x H: 0')
CIE Type: Direct

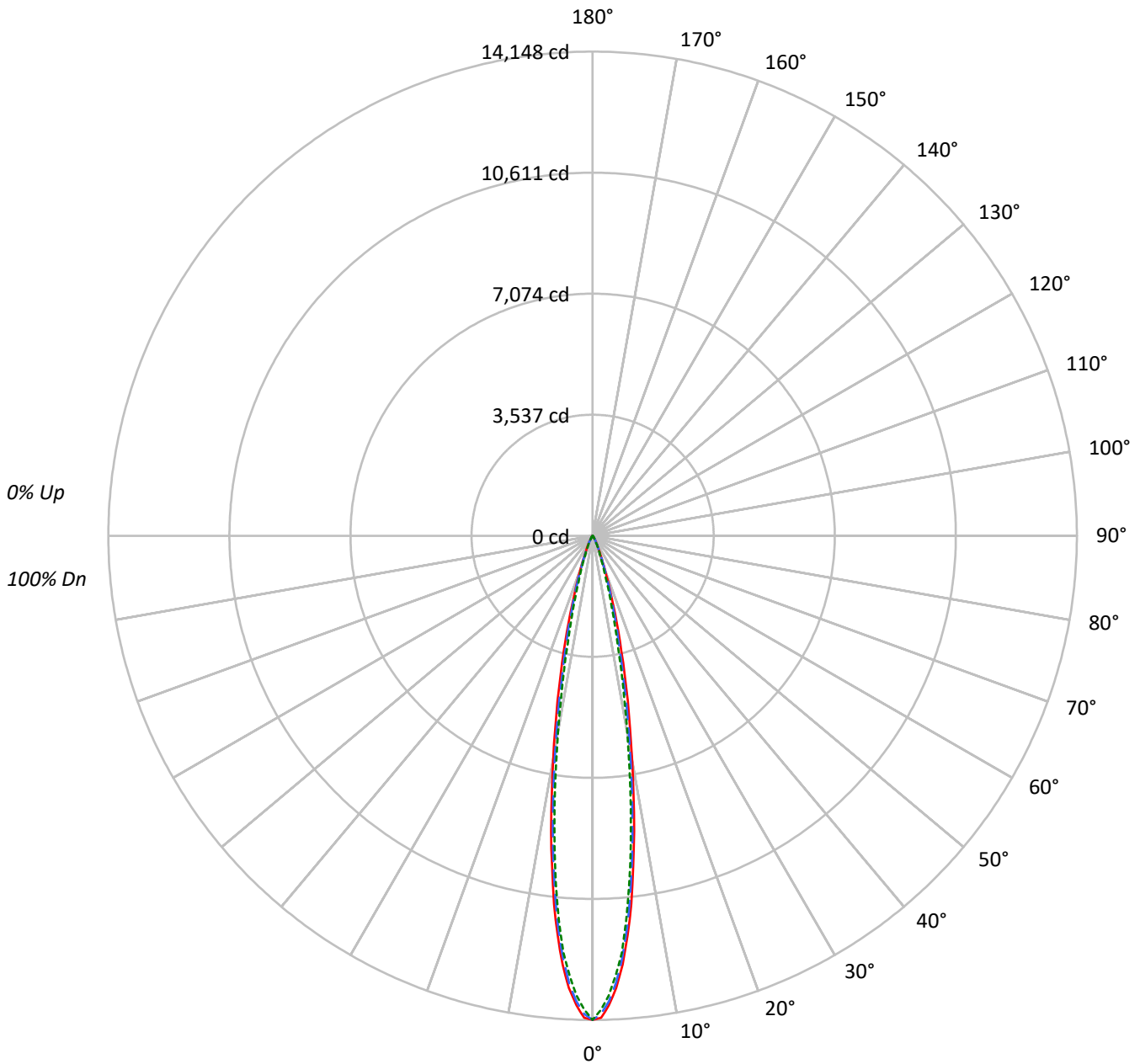
Input Watts (W): 20.6
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P282388

CATALOG NUMBER: LDA2B208040D010 EU2B20NFL258040 2LBAPINSQ1MMS

Luminous Intensity Polar Plot





TEST NUMBER: P282388

CATALOG NUMBER: LDA2B208040D010 EU2B20NFL258040 2LBAPINSQ1MMS

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100															
1	115	113	112	110	113	111	110	108	107	106	105	104	103	102	100	100	99	97				97															
2	112	109	106	104	110	107	105	103	104	102	100	101	100	98	99	97	96	95				95															
3	109	105	101	99	107	103	100	98	101	99	97	99	97	95	97	95	94	92				92															
4	106	101	98	95	105	100	97	94	98	96	93	96	94	92	95	93	91	90				90															
5	103	98	94	92	102	97	94	91	96	93	91	94	92	90	93	91	89	88				88															
6	101	95	92	89	100	95	91	89	93	90	88	92	90	88	91	89	87	86				86															
7	99	93	89	87	98	92	89	86	91	88	86	90	88	86	89	87	85	84				84															
8	96	91	87	85	96	90	87	84	89	86	84	88	86	84	88	85	83	83				83															
9	94	89	85	83	94	88	85	82	87	84	82	87	84	82	86	84	82	81				81															
10	93	87	83	81	92	86	83	81	86	83	81	85	82	80	85	82	80	79				79															

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6980033	6980033	6980033
5°	5808150	5701672	5586577
10°	3326859	3121861	2913607
15°	1479688	1314149	1101262
20°	536785	504706	399859
25°	206096	192433	165705
30°	88871	82661	73375
35°	42039	42039	34812
40°	21060	21768	17582
45°	12210	11443	10675
50°	8366	7522	7522
55°	6537	4731	5591
60°	5427	3256	4342
65°	3852	2568	3852
70°	3173	1587	3173
75°	2097	2097	2097
80°	0	0	0
85°	0	0	0



TEST NUMBER: P282388

CATALOG NUMBER: LDA2B208040D010 EU2B20NFL258040 2LBAPINSQ1MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	920.2	48.1
10°-20°	744.7	38.9
20°-30°	179.6	9.4
30°-40°	45.8	2.4
40°-50°	13.6	0.7
50°-60°	5.8	0.3
60°-70°	2.8	0.1
70°-80°	0.9	0.0
80°-90°	0.0	0.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1844.4	96.4
0°-40°	1890.2	98.8
0°-60°	1909.6	99.8
0°-90°	1913.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1913.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	14148	14148	14148	14148	14148	
5°	11728	11620	11513	11412	11280	948
15°	2897	2828	2573	2318	2156	826
25°	379	381	354	321	304	196
35°	70	71	70	63	58	48
45°	18	18	16	15	15	15
55°	8	6	6	6	6	7
65°	3	3	2	2	3	4
75°	1	1	1	1	1	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	



TEST NUMBER: P282388

CATALOG NUMBER: LDA2B208040D010 EU2B20NFL258040 2LBAPINSQ1MMS

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	14147.9	14147.9	14147.9	14147.9	14147.9
1°	14084.7	13986.4	13974.4	14035.6	13855.5
2°	13724.6	13654.7	13614.4	13650.4	13446.3
3°	13230.3	13162.6	13089.5	13090.6	12862.6
4°	12557.0	12503.6	12380.3	12343.2	12211.1
5°	11727.8	11619.7	11512.8	11412.4	11280.4
6°	10811.2	10671.5	10518.8	10369.3	10234.0
7°	9733.1	9640.4	9438.5	9234.5	9119.9
8°	8719.4	8569.9	8334.3	8078.9	7981.8
9°	7629.4	7522.4	7251.8	6955.0	6857.9
10°	6640.8	6529.5	6231.6	5901.0	5815.9
11°	5713.3	5608.5	5298.7	4951.7	4861.1
12°	4928.8	4780.4	4424.6	4123.5	4035.1
13°	4147.5	4046.0	3708.8	3411.0	3239.6
14°	3483.0	3399.0	3093.4	2831.6	2650.4
15°	2897.0	2828.3	2572.9	2317.6	2156.1
16°	2376.5	2334.0	2132.1	1885.5	1753.5
17°	1928.1	1888.8	1760.0	1533.1	1421.8
18°	1557.1	1551.6	1444.7	1248.3	1149.0
19°	1281.0	1278.8	1180.6	1015.9	934.0
20°	1022.4	1036.6	961.3	817.3	761.6
21°	833.6	841.3	781.3	672.2	622.0
22°	678.7	684.2	644.9	555.4	528.1
23°	556.5	559.8	527.0	460.5	436.5
24°	458.3	460.5	431.0	384.1	363.4
25°	378.6	380.8	353.5	320.8	304.4
26°	314.3	316.4	292.4	269.5	253.1
27°	260.8	265.2	241.1	227.0	209.5
28°	222.6	223.7	201.9	193.1	176.8
29°	182.2	188.8	170.2	162.6	150.6
30°	156.0	159.3	145.1	139.7	128.8
32.5°	103.7	105.8	99.3	94.9	86.2
35°	69.8	70.9	69.8	63.3	57.8
37.5°	48.0	48.0	49.1	41.5	39.3
40°	32.7	32.7	33.8	28.4	27.3
42.5°	24.0	24.0	22.9	19.6	19.6
45°	17.5	17.5	16.4	15.3	15.3
47.5°	14.2	13.1	12.0	12.0	12.0
50°	10.9	10.9	9.8	8.7	9.8
52.5°	8.7	8.7	7.6	7.6	7.6
55°	7.6	6.5	5.5	5.5	6.5
57.5°	5.5	5.5	4.4	4.4	5.5
60°	5.5	4.4	3.3	4.4	4.4



TEST NUMBER: P282388

CATALOG NUMBER: LDA2B208040D010 EU2B20NFL258040 2LBAPINSQ1MMS

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
67.5°	3.3	2.2	2.2	2.2	2.2
70°	2.2	2.2	1.1	1.1	2.2
72.5°	1.1	1.1	1.1	1.1	1.1
75°	1.1	1.1	1.1	1.1	1.1
77.5°	1.1	1.1	0.0	0.0	1.1
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By E9808895 / USPTCWHP6082093





— 0°-180° - - 45°-225° - - - - 90°-270°







62.5°	4.4	3.3	3.3	3.3	3.3
65°	3.3	3.3	2.2	2.2	3.3



(END OF REPORT)